

a<sup>8</sup> don't  
Referring to Figure 6A, the user may cause window 605 to appear to configure the analog output buffer. Referring to Figure 6B, the user may cause a clock window 606 to appear by clicking on a clock MUX 616 to configure which clock will be the input to a column of analog programmable system blocks 410b. Referring to Figure 6C a port selection window 607 is shown. The port selection window 607 may be made to appear by clicking on or near the pin input MUX 608. The user may then select the input port. Referring now to Figure 6D, the user may click on or near the analog clocking MUX 614 to cause a window 613 to appear to select which digital programmable system block 410a should be selected by the clock MUX (616 of Figure 6B).

IN THE CLAIMS

Please amend the claims as follows:

a<sup>9</sup>  
8. (AMENDED) The method of Claim 1, wherein said graphical user interface represents a plurality of digital and analog programmable system blocks, wherein said module maps to at least one of said blocks.

IN THE ABSTRACT

Please replace the Abstract with the following new Abstract:

a<sup>10</sup>  
A method to program a microcontroller using a software program. First a user selects a module from a catalog of available modules. The module may be for implementing an amplifier, timer, pulse width modulator, etc. This causes information related to the selected module to be displayed. For example, a schematic and data sheet for the selected module may be displayed. Next, the user requests a position and places the selected module in a graphical user interface, which represents the resources available to implement the available modules. For example, the resources may be programmable system blocks. Additional user modules may then be selected and placed. The user then configures the circuit by selecting circuit parameters for the user modules (e.g.,